

REMARKS

Claims 2, 3, 5, 7-10, 13, and 15-40 are pending in the present application. Claims 15, 24 and 36 are independent claims.

The Examiner is thanked for the telephone call notifying the undersigned that the Office Action mailed on June 3, 2004 was returned to the Patent Office as undeliverable, due to the use of a prior address. The Office Action was received by the undersigned via facsimile on August 19, 2004. It is believed that the correspondence address was amended for this matter in October 2002; however, a new change of correspondence address is enclosed with this Reply. In addition, it is requested that the due date for reply be changed to November 19, 2004, reflecting the date that the Action was faxed to the undersigned.

Claims 2-3, 5, 7-10, 13, and 15-27 and 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US Pat. 5,399,316) in view of Hodges et al. (US Pat. 5,942,102) and Zimmer et al. (US Pat. 5,814,522). It is submitted that the resulting combination or modification proffered by the rejection fails to show or suggest a device as recited in claims 15, 24, and 36 in light of the amendments and/or the accompanying remarks.

Yamada discloses a reaction vessel 10 with a base member 11, spacers 12, 13 spaced apart forming a groove 14, and a cover 17 having a U-shaped notched portion 15. See, Column 4 lines 60-67.

It is proposed that Claims 15 and 24 be amended to clarify that the device's detection element has reagents for the detection reaction of the analyte in the liquid and that claims 15, 24, and 26 be amended to specify the spatial separation of the detection element and the sample application site. Support for the amendments is found in the specification and drawings and particularly at page 3, third paragraph; page 9, second paragraph; and Figures 2A-2F. The amendments are properly entered here as they do not add new matter and put the application in condition for allowance of better form for appeal.

Regarding claims 15, 24 and 36, it is submitted that Yamada fails to disclose or suggest a device including a channel that has a sample application opening that is

spatially separated from the detection element. In fact, it is submitted that Yamada teaches away from such an arrangement. In that regard, the Examiner's attention is directed to Figure 1 of Yamada, where it is shown that its reaction region 21 and notched portion 15 are contiguous.

Likewise, Hodges et al. is devoid of description or suggestion of a device having a channel with a sample application opening that is spatially separated from the detection element. Hodges et al. at most teach that opposing palladium coatings 2, 6 and notched portions 9 are contiguous. In this regard, the Examiner's attention is directed to Figures 10 and 11 Hodges et al. As such, Hodges et al. fail to cure the inadequacies of Yamada.

Zimmer et al. fails to cure the inadequacies of Yamada and Hodges with taken alone or in combination with one another. Specifically, Zimmer et al. fails to teach or suggest a channel that is formed at least partially by the carrier and the detection element having reagents, let alone a channel with a sample application opening that is spatially separated from the detection element. The capillary gap 11 of Zimmer in Figures 3 and 4 is simply not defined in part by its areas 6,7 containing reagent. In that regard, the Examiner's attention is directed to Figure 3 of Zimmer, where the capillary gap is defined by the fleece 1, covering foil 9, and spacer 10 and Figure 4 where the capillary gap is defined by the fleece 1, support foil 8 and the spacer 10. In each of the Figures 3, 4, the area 6 (Figure 3) and areas 6,7 (Figure 4) fail to form a portion of the capillary gap 11. As such, Zimmer et al. fail to cure the inadequacies of Yamada and Hodges et al.

In light of the above, it is submitted that Yamada, Hodges et al., and Zimmer et al. when taken as a whole, fail either alone or in combination to disclose or suggest a test element comprising, "an inert carrier, a detection element having reagents for the detection reaction of the analyte in the liquid, and a capillary liquid transport channel . . . formed at least partially by the carrier and the detection element . . . wherein the sample application opening is spatially separated from the detection element and wherein a notch is located in a surface forming the channel at an edge of the test element forming the sample application opening and extends toward the vent opening so that one side of the edge of the test element forming the sample application opening is at least partially discontinuous and a surface opposite to the notch is exposed", as recited by amended claim 15. Claims 2-3, 5-10, 13, and 16-23 depend from claim 15.

It is further submitted that Yamada, Hodges et al., and Zimmer et al. when taken as a whole, fail either alone or in combination to disclose or suggest a test element comprising, "an inert carrier, and a detection element having reagents for the detection reaction of the analyte in the liquid and cooperating with the carrier to form at least part of a channel formed for capillary liquid transport, the channel having a sample application opening at one end and a vent opening at the other end . . . wherein the sample application opening is spatially separated from the detection element and wherein a surface forming the channel includes a notch at the sample application opening and extending toward the vent opening so that one side of the edge is discontinuous", as recited in claim 24. Claims 25-35 depend from claim 24.

Finally, Yamada, Hodges et al., and Zimmer et al. when taken as a whole, fail either alone or in combination to disclose or suggest a method for determining an analyte in a liquid sample, the method comprising the steps of "providing an analytical test element . . . comprising an inert carrier, a detection element specific for the detection of the analyte, and a capillary liquid transport channel, the channel including a sample application opening at one end and a vent opening at the other end, wherein the channel is formed at least partially by the carrier and the detection element and extends in the direction of capillary transport from the sample application opening to at least the edge of the detection element that is nearest to the vent opening, wherein the sample application opening is spatially separated from the detection element and wherein a notch is located in a surface forming the channel at the edge of the test element forming the sample application opening and extends toward the vent opening . . . contacting the test element with the liquid sample at the edge of the sample application opening . . . and observing the liquid sample in the detection element to determine whether changes in the detection element exist following contact with the liquid sample exist, wherein the changes relate to a presence of the analyte in the liquid sample". Claims 37-40 depend from claim 36.

It is respectfully contended that the differences between the claimed invention and the cited art are such that Applicant's invention as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made. It is respectfully contended that the claimed invention meets the test of patentability under 35 U.S.C. 103(a). Entry of the amendments, reconsideration of the rejections of the claims, and withdrawal of the rejections leading to allowance of the claims is respectfully requested.

Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US Pat 5,399,316) in view of in view of Hodges et al. (US Pat. 5,942,102) and Zimmer et al. (US Pat. 5,814,522) as applied to claims 2-3, 7-10, 13, 15-27, and 29-40 above, and further in view of Heller et al. (US Pat. 6,238,624).

Yamada, Hodges et al., and Zimmer et al. have been discussed above with reference to amended claims 15 and 24. Heller et al. disclose a self-addressable, self-assembling microelectronic device designed and fabricated to actively carry out and control multi-step and multiplex molecular biological reactions in microscopic formats. See, the abstract. Heller et al. fail to cure the inadequacies of Yamada, Hodges et al., and Zimmer et al., in relation to amended claims 15 and 24. Claim 5 depends from claim 15 and claim 28 depends from claim 24.

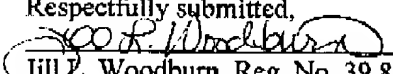
It is respectfully contended that the differences between the claimed invention and the cited art are such that Applicant's invention as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made. It is respectfully contended that the claimed invention meets the test of patentability under 35 U.S.C. 103(a). Reconsideration of the rejections of the claims and withdrawal of the rejections leading to allowance of the claims is respectfully requested.

Claims 2-3, 5, 7-10, 13, and 15-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,592,815 to Zimmer. The rejection is respectfully traversed. It is respectfully submitted that the two sets of claims do not read on each other. However, if the rejection is maintained, a terminal disclaimer will be submitted upon receipt of a Notice of Allowance for this matter.

The claims as submitted herein are believed to be in condition for allowance, and allowance of the application is respectfully requested. In addition, it is requested that this paper be considered a request for an extension of time and that all fees due be charged to Deposit Account Number 50-0877 with reference to (RDID 0044 US).

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Respectfully submitted,


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